

### **REMARKS**

Applicants thank the Examiner for the thorough consideration given the present application. Claims 1, 5 and 7 are currently being prosecuted. The Examiner is respectfully requested to reconsider his rejections in view of the amendments and remarks as set forth below.

#### **Finality of the Rejection**

Applicants note that the Examiner has made the current rejection a final rejection. Applicants submit that this is improper and requests that the finality of the rejection be removed. It is noted that in the previous Amendment, the independent claim was modified to point out specific ions that can be used with the host matrix, including silver, copper and chlorine. It is noted that this list of foreign ions was previously listed in original claim 2. While the language utilized is slightly different in amended claim 1, the content is very similar to original claim 2. Accordingly, Applicants submit that the amendment to claim 1 should not have required the Examiner to institute a new reference in regard to this claim. Accordingly, Applicants submit that this rejection should not have been made final.

#### **Entry of Amendment**

Applicants submit that the present Amendment should be entered into the official file since it makes the claims allowable. However, if the Examiner does not agree that the amended claims are allowable, Applicants submit that the Amendment should be entered for the purposes of appeal. The present Amendment cancels three additional claims thus limiting the issues on appeal. Further, one of the changes to claim 1 merely moves a limitation which previously was at the end of the claim to the first paragraph of the claim. Another change to claim 1 and also to claim 7 merely changes the form of the chemical formula which the Examiner has required. The

remaining change to claim 1 is the recitation of the light emitting diode in place of the radiation source. However, this limitation was previously found in claim 3. Accordingly, Applicants submit that no new issues are being presented and accordingly entry of the Amendment is appropriate.

#### Claim Objections

The Examiner objected to the claims as being unclear. The Examiner objected to the chemical formula. Applicants have changed the form of the chemical formula so as to be clear. Accordingly, this objection is believed to be overcome.

#### Rejection Under 35 USC 102

Claims 1, 4 and 7 stand rejected under 35 USC 102 as being anticipated by Evans (U.S. Patent 3,602,753). This rejection is respectfully traversed.

The Examiner states that Evans shows a radiation source and a semiconductor type phosphor wherein the radiation emits light ranging from about 495 nm to 340 nm. With regard to claim 4, the Examiner states that the radiation source includes an electron beam.

First, claim 4 has been cancelled rendering this part of the rejection moot. In regard to claim 1, it is pointed out that the claim now describes the method as using a light emitting diode. The Examiner has already admitted that this reference does not include the description of a light emitting diode since this limitation, which was found in claim 3, required a secondary reference. Accordingly, Applicants submit that claim 1 overcomes this rejection.

Rejection Under 35 USC 103

Claim 5 stands rejected under 35 USC 103 as being obvious over Evans in view of Poss (U.S. Patent 3,657,142). This rejection is respectfully traversed.

The Examiner admits that Evans fails to teach how the phosphor is prepared. The Examiner relies on Poss to show that it is common to affect the activation of coactivated zinc sulfide phosphors through organic metal thermodecomposition.

Claim 5 has now been amended to remove two of the four types of steps, including the organic metal thermal decomposition. Accordingly, Applicants submit that Poss no longer teaches the preparation of the phosphor by chemosynthesis or solid gas sintering.

Accordingly, claim 5 is not obvious over these two references.

Claims 3 and 6 stand rejected under 35 USC 103 as being obvious over Evans et al. in view of Shimizu (U.S. Patent 6,614,179). This rejection is respectfully traversed.

With regard to claims 3 and 6, these claims have been cancelled rendering this rejection moot. However, since the limitations of claim 3 have been to claim 1, this rejection will be considered in regard to claim 1 instead.

The Shimizu reference teaches the formation of a light emitting diode with a phosphor layer surrounding the solid state diode. The phosphor which is utilized contains one of the rare earth elements. While the Shimizu et al. reference does show a light emitting diode, it is used with a different type of phosphor than that which is presently claimed.

The Evans reference teaches a phosphor which is used on a cathode ray tube screen. Applicants submit that it would not be obvious to one of ordinary skill in the art to combine the teachings of Shimizu et al. with that of Evans. First, the phosphors which are utilized are different. Secondly, the Shimizu et al. device is used in a solid state arrangement whereas the

teachings of Evans relate to a cathode ray tube screen. Applicants submit that it would not be obvious to one of ordinary skill in the art to look to Shimizu to find a light emitting diode since the Evans device is used in a cathode ray tube and uses different phosphors. There would be no motivation for one skilled in the art to look to such a solid state device. Further, the use of different phosphors makes the combination less likely. Accordingly, Applicants submit that it would not be obvious to one of ordinary skill in the art to combine these two references. Accordingly, Applicants submit that claim 1 is allowable over this combination of references.

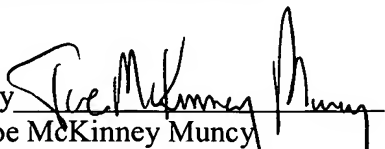
Claims 5 and 7 depend from claim 1 and as such are also considered to be allowable. In addition, claim 5 describes the particular method of preparing the phosphor. Claim 7 further specifies the use of silver and chlorine for M and N. Accordingly, these claims are additionally allowable.

Conclusion

In view of the above remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner, either alone or in combination. In view of this, reconsideration of the rejections and allowance of all of the claims are respectfully requested.

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Respectfully submitted,

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